

REMARKS

Pending Claims

Claims 1-10 are pending in this application. Claims 1, 6, 7 and 10 have been amended.

Drawings

Fig. 1 of the drawings has been amended by adding a box 40 to illustrate a control and/or regulating apparatus as described in original claim 1 and as described on page 1, lines 7 and 8 and page 4, lines 6-8 of the specification. No new matter has been added by the addition of the control box to the drawing since the control is described in the original specification and claims.

Specification

The specification has been amended at page 4, line 7 to identify the control and/or regulating apparatus by the numeral 40.

Claim Rejections Under 35 U.S.C. §102 and 103(a)

Claims 1-10 stand rejected under 35 U.S.C. §102(b) as being anticipated by Markert et al. (U.S. Pub. No. 2003/0114097, hereafter “Markert”).

Claim 4 stands rejected under 35 U.S.C. §103(a) as obvious over Markert.

For the reasons set forth hereafter, it is submitted that the amended claims are patentable.

Patentability of the Claims

Independent claims 1 and 10 have been amended to further define that the threading element is mounted forwardly of the counter-surface in a horizontal transport plane of the meat with the threading element being bent in the horizontal transport plane at an angle with respect to the counter-surface. This Amendment further distinguishes over the newly cited Markert reference wherein the element referred to by the Examiner as the threading element has a front edge which is straight across a horizontal transport plane and is orthogonal thereto and wherein the threading element is bent upwardly out of the horizontal transport plane of the meat. This difference will be discussed in greater detail hereafter.

Applicants' invention as now claimed is directed to an apparatus for the automatic processing of meat such as fish and includes a transport element 11 such as a conveyer for transporting the meat and a cutting element 12 such as a circular blade for cutting or trimming the meat. A counter-surface 13 is shown in Figs. 1, 5 and 7 having a slit 26 therein which is provided under the circular blade A control or regulating apparatus 40 is provided which is functionally connected with the cutting element. Significantly, a threading element 14 is mounted forwardly of the counter-surface 13 in a horizontal transport plane E_1 of the meat, with the threading element being bent in the horizontal plane at an angle with respect to the counter-surface whereby an outer end of the threading element extends at least partially across the horizontal transport plane E_1 to at least partially lift one side of the meat prior to the meat reaching the counter-surface.

As clearly shown in Figs. 5 and 7, the threading element 14 is angled at a preferred angle of approximately 30 degrees to extend at least laterally part of the

way across the surface of the horizontal transport element 11 so that the leading edge of the threading element 14 initially contacts one side of the meat being transported along the transport element whereby only a part of the meat is initially lifted off from the transport element. This prevents blunt or frontal impacting of the entire piece of meat on front of the threading device all at once which causes pieces of meat to accumulate and interfere with proper cutting. The remainder of the meat is then lifted off the transport element by the threading element 14 as the meat continues to be moved in the direction of transport. In this fashion, the meat is initially lifted prior to reaching the counter-surface 13 whereby the cutting element 12 is easily enabled to cut or trim the meat. A deflector element 30 is arranged on the side of the counter-surface 13 which is opposite the threading element 14 whereby material such as fat which is cut during the cutting process is removed from the transport element. The unit consisting of the counter-surface and the threading element preferable is constructed as an integral unit so as to be swivellable independently with respect to the apparatus.

Claim 10 is directed to a method for the automated processing of meat using the threading element.

Applicants' invention, as described above, is not anticipated or otherwise rendered unpatentable by the newly cited Markert reference.

With respect to the newly cited Markert et al. '097 reference, this reference shows a blade assembly 14 having a body 30 with at least one notch 32 that forms a cutting surface 34 for separating chicken thighs 16 into spare ribs 18 and meat patties 20. The blade assembly includes two downwardly extending ramps 36 positioned at the sides of a channel 24 in front of a cutting surface 34. The front

edges of the ramps 36, however, extend orthogonally or perpendicularly to the direction of transport indicated by the arrow in Fig. 1. The ramps 36 are angled upwardly from the horizontal plane of the conveyor 12 to the blade body 30 so that the angle is not in the horizontal plane of the conveyor 12 which moves forwardly in the direction of the arrow shown in Fig. 1. With this type of structure, the poultry parts to be processed are frontally pushed or slid onto the ramps 36. Therefore, the meat being processed comes up against the ramp all at once. This leads to the problem of the meat accumulating in front of the ramps and causes interruption of the processing of the meat.

By contrast, in Applicants' invention, the threading element 14 is bent or angled in the horizontal transport E_1 plane at an angle with respect to the counter surface whereby an outer end of the threading element extends at least partially across the transport plane so that it initially lifts only one side of the meat prior to the meat reaching the counter surface. In this way, accumulation of the pieces of meat at the front of the threading element is avoided.

As noted above, independent claims 1 and 10 have been amended to specifically call for the angle being in the horizontal transport plane. It is further noted that claim 6 has been amended to specify that the unit consisting of the counter surface and the threading element is swivellable independently with respect to the apparatus. In rejecting claim 6, the Examiner stated that the counter surface and the threading element of Markert is swivellable via the wheel train 48-56. This construction in Markert, however, is not at all the same as Applicants'. The wheels in Markert cause the entire apparatus to swivel not just the unit which includes the ramps 36 and the blade body 30 whereas in Applicants' invention, it is only the unit

containing the threading element and the counter-surface that is swivellable with respect to the rest of the apparatus. Accordingly, claim 6 and the claims dependent therefrom are patentable for this reason as well as for the reasons advanced with respect to claim 1 from which they depend.

For the foregoing reasons, it is submitted that claims 1-10 are patentable.

Conclusion

In view of the foregoing amendments and remarks, the Applicants request reconsideration of the rejection and allowance of the claims.

To the extent necessary, the Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of Mattingly & Malur, P.C., Deposit Account No. 50-1417 (referencing attorney docket no. WK-5391).

Respectfully submitted,

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